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## IN THE CLAIMS

1. - 12. (canceled)

13. (currently amended) A delay locked loop circuit for maintaining phase synchronization between a received spreading code included in a spread-spectrum signal and a reference spreading code, comprising:

a reference spreading code generator for generating the reference spreading code;
a combined code generator for generating a combined spreading code from by first
weighting and then combining a plurality of phase shifted occurrences of the reference spreading code;

arithmetic means for detecting a phase difference between the received spreading code and the reference spreading code using the combined spreading code; and

voltage controlled oscillatorphase control means for controlling a phase of the reference spreading code on the basis of the phase difference, wherein

the combined code generator makes positive, and successively reduces in magnitude, the weights of n-number of reference spreading codes of small phase shift constituting a first half of 2n-(where n is a positive integer) number of reference spreading codes that have been successively shifted in phase, and makes negative, and successively increases in magnitude, the weights of n-number of reference spreading codes of large phase shift constituting a second half of the reference spreading codes that have been successively shifted in phase.

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Page 4 of 6 14. (original) The delay locked loop circuit of claim 13, wherein the arithmetic means includes a multiplier for multiplying the received spreading code by the combined spreading code, and filter for filtering an output of the multiplier.

## 15. - 16. (canceled)

17. (currently amended) The delay locked loop circuit of claim 1613, wherein said delay locked loop circuit providing a plurality of groups of weights for which the n is different, outputting the a combined spreading code using a group of weights for which n is large, and outputting a combined spreading code using the another group of weights for which n is small whenever the phase difference falls below a set value.

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